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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,834	08/17/2001	Kevin Robert Coffey	YOR920010658US1	4541
36023	7590	11/26/2004	EXAMINER	
HITACHI GLOBAL STORAGE TECHNOLOGIES, INC.			RODRIGUEZ, GLENDA P	
5600 COTTLE ROAD, NHGB-0142			ART UNIT	
SAN JOSE, CA 95193			PAPER NUMBER	

2651

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/931,834

Applicant(s)

COFFEY ET AL.

Examiner

Glenda P. Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Examiner acknowledges that Claims 2-5 and 7-10 have been cancelled in Paper filed on 3/30/2004.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thundar et al. (US Patent No. 6, 050, 722) in view of Chatigny et al. (Internet article "PIEZO FILM SENSORS").

Regarding Claim 1, Thundar et al. teach an assembly, comprising:

A temperature sensing element comprising a piezoelectric film for measuring the blackbody radiation of a medium (Col. 8, Lines 5-39. The piezoelectric sensor is known to sense black body radiation as mentioned by the Applicant in Page #8, L. 19-20);

A controller responsive to the temperature sensing element and capable of inputting power to a media based on a measured temperature of the medium (See Abstract. The processor (The processor is also a controller because it controls the apparatus) is capable of inputting power to the medium and is responsive to the temperature being received by the sensors. The processor is also responsive to the temperature being inputted because after the different wavelengths have been received, the

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medium proceeds to manipulated the received data (See Col. 3, L. 48-56).).

However, Thundar et al. does not explicitly teach that the piezoelectric sensor is a piezoelectric film. Chatigny et al. teaches that piezoelectric sensors are used to detect radiation and temperature behavior in a device (See "*PIEZO FILM SENSORS*" , Page 2, Paragraph 7, and Page, 4, Paragraph 2. Chatigny et al. teaches numerous advantages and application towards piezoelectric films like for example to control vibrations and temperature <sup>in</sup> electronic devices (in the field of robotics and printers), See Table 3 for more examples.). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to modify Thundar et al.'s invention with the teaching of Chatigny et al. to use a piezoelectric film to detect temperature and to control the same because the piezoelectric films has the property that it is thin and flexible and it does not distort the motion of the structure (As disclosed by Chatigny et al. in Page 6 under Advantages).

Claim 6 has limitations similar to those treated in the above rejection, and is met by the references as discussed above. Claim 6 however also recites the following limitations..."a directed energy source for heating a medium (Col. 7, L. 26-67. It is obvious to an artisan of ordinary skill in the art to know that a energy source must be present in the device in order to generate a heating or light source in order to measure black body radiation.)".

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 and 6 have been considered but are moot in view of the new ground(s) of rejection. The Applicant argues that. "piezoelectric

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films (as taught by the present application) are far more sensitive to blackbody radiation than the piezoelectric crystals of Thundar.” Examiner cannot concur with the Applicant because the Applicant never actually points out the advantages of a piezoelectric sensor. In fact it points the piezoelectric film as an example (See Applicant’s Specification on Page 8, L. 19-20). It is recommended to the Applicant that if the new feature for the invention is the piezoelectric sensor, to point this feature citing it as the actual feature being used, not as an example.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenda P. Rodriguez whose telephone number is (703) 305-8411. The examiner can normally be reached on Monday thru Thursday: 7:00-5:00; alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Sinh Tran can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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A handwritten signature in black ink, appearing to be 'gpr'.

gpr  
Nov 17, 2004.

A handwritten signature in black ink, appearing to be 'Sinh Tran'.

SINH TRAN  
PRIMARY EXAMINER